# Summer 2019 Volume 24: Number 3

Director, Bureau of Laboratories Sandip Shah, PhD, HCLD(ABB)

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### **Bureau Vision**

The Bureau of Laboratories is a stronger, more diverse team within an integrated public health system. We utilize advanced technology and innovative leadership to provide comprehensive public health services in our dynamic global community.

## **Bureau Mission**

We are dedicated to continuing leadership in providing quality laboratory science for healthier people and communities through partnerships, communication and technical innovation.





## IT'S OFFICIAL

## **Author: Martha Boehme, Quality Assurance**

The Accreditation Committee of the College of American Pathologists (CAP) has awarded accreditation to Michigan Department of Health and Human Services Bureau of Laboratories, based on results of the recent on-site inspection as part of the CAP's Accreditation Programs.

MDHHS BOL is one of more than 8,000 CAP-accredited facilities worldwide, and CAP congratulated laboratory director Sandip H. Shah, PhD, for the excellence of the services being provided.

During the inspection, a team of eight experts from other CAP-accredited laboratories examined laboratory records and quality control of procedures for the preceding two years. CAP inspectors also examined laboratory staff qualifications, equipment, facilities, safety program and record, and overall management.

The U.S. federal government recognizes the CAP Laboratory Accreditation Program, begun in the early 1960's, as being equal to, and in some areas more stringent than, the government's own inspection program.

The current CAP Accreditation certificate is available on the front page of our laboratory web site: <a href="https://www.michigan.gov/mdhhslab">www.michigan.gov/mdhhslab</a>





# **Laboratory Biosafety Training Available**

## **Author: Carrie Anglewicz, Biosafety Officer**

A comprehensive laboratory safety training program that addresses work practices, engineering controls, and personal protective equipment is essential. Safety training programs provide a baseline for safe expectations from employees, reduce procedural drift, and most importantly, reduce potential exposure to biologic and chemical hazards.

Laboratory managers, responsible for testing areas, cannot assume laboratory scientists receive training on fundamental biosafety practices, such as, proper use of biosafety cabinets, in school or their internship programs. Every laboratory should establish a laboratory safety training program to identify potential biosafety risks and ensure safe laboratory practices. It is not uncommon to see "creative solutions," as pictured below, in which specimen racks were used to hold a



biosafety cabinet sash at its certified operational height. These "fixes," while inexpensive and quick, may lead to hazardous incidents.

Regularly scheduled biosafety training is necessary for both new and seasoned employees.

Clinical laboratories are encouraged to utilize new, free, resources developed by the Centers for Disease Control and Prevention (CDC), to provide competency level and refresher biosafety training in targeted areas. These trainings can be accessed on MI-Train: https://www.train.org/mi-train/welcome

Topic	MI-Train Course ID	
Fundamentals of Working Safely in Biological Safety Cabinets	1041976	
Fundamentals of Centrifuge Safety	1073746	
Fundamentals of Chemical Fume Hood Safety	1074415	

Assistance is also available for clinical laboratories who have not implemented biosafety risk assessments into their overall biosafety plan. Risk assessments are instrumental in identifying gaps, such as training needs, before laboratory exposures and illnesses occur.

Contact Carrie Anglewicz, Biosafety Officer: <a href="mailto:anglewiczc@michigan.gov">anglewiczc@michigan.gov</a>
517-335-9654 for laboratory safety questions, training needs, or to arrange a non-regulatory safety walk-through of your laboratory.



## Michigan 2018-2019 Influenza Season Summary

#### **National Season Patterns**

According to the Centers for Disease Control and Prevention (CDC), the 2018-2019 influenza season was nationally classified as "moderate" based on reported rates of two severity indicators: influenza-like illness (ILI) and hospitalizations. CDC's preliminary flu burden estimates for the U.S. season showed ILI, medical visits, hospitalizations, and deaths were lower compared to the prior season. The 2017-2018 season was one of the most severe flu seasons in recent decades and severity was classified as high across age groups (children, adults, older adults). The 2018-2019 national flu season was also very protracted, with ILI levels at or above baseline for 21 weeks. This duration broke the record of 20 weeks (during 2014-2015 season) which was the previous 10-year high. Nationally, flu activity most commonly peaks between December and February.

#### Michigan's 2018-2019 Influenza Season

Over the past five seasons in Michigan, the peak of ILI ranged from 2.7% (2015-2016) to 5.6% (2017-2018). For the 2018-2019 flu season, Michigan peaked at 3.2% during the Week Ending March 23, 2019 (Week 12). Michigan also reported three pediatric deaths this flu season in comparison to two pediatric deaths during the 2017-2018 season. The Michigan 2018-2019 flu season was moderately severe with two peaks of ILI activity (Figure 1). The two peaks of activity reflect the two main strains of flu virus circulating throughout the 2018-2019 season. Initially, the influenza A(H1N1) virus was predominately found in patients with flu, corresponding to a sub-peak during December 2018. As the season progressed, influenza A(H3N2) virus became the predominate virus, corresponding to the main peak of flu activity during March 2019.

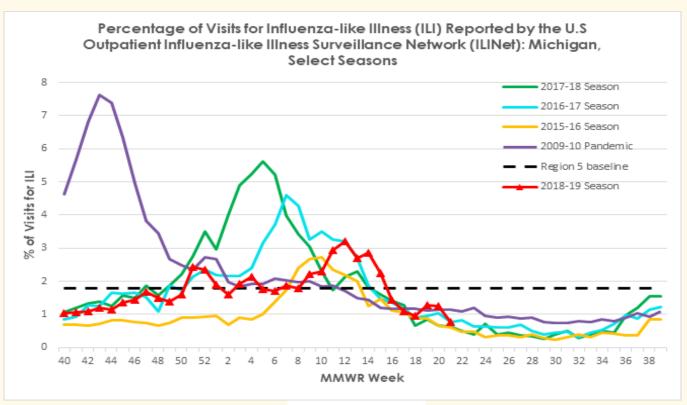


Figure 1

#### **Influenza-associated Hospitalizations**

According to the Influenza Hospitalization Surveillance Project (IHSP), a total of 930 reported flu-associated hospitalizations were reported for the 2018-2019 Michigan flu season. This is a substantial decrease from 1,596 reported during the 2017-2018 flu season. Of the 930 reported cases, 900 were due to flu A (97%), 28 to flu B (3%), and 2 to flu A & B coinfections (<1%). There were 118 (13%) pediatric cases (≤17 years old) and 812 (87%) adult cases (≥18 years old). Like past seasonal trends, those aged 0-4 years and 65 years and older were most affected, reaching a seasonal peak of 13.1 per 100,000 for those aged 0-4 years old and 29.6 per 100,000 for those aged 65 years and older compared to the overall seasonal peak of 9.1 per 100,000.

## Michigan 2018-2019 Influenza Season Summary

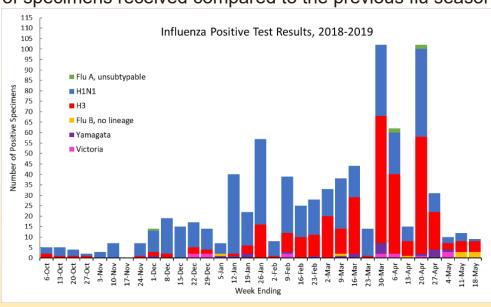
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#### **Congregate Setting Outbreaks**

There were 79 congregate setting outbreaks reported to MDHHS for the 2018-2019 flu season. This is much lower than the 270 reported from the 2017-2018 season. Of the 79 outbreaks, 68 were confirmed by testing for the following respiratory viruses: flu A (56), flu B (3), flu A & B (1), RSV (4), adenovirus (1), coronavirus (1), human metapneumovirus (1), and human rhinovirus/enterovirus (1).

## Virologic Surveillance

The MDHHS Bureau of Laboratories (BOL) successfully subtyped 803 specimens of 933 submitted for testing during the flu reporting season (Figure 2). The number of specimens successfully subtyped was like the previous year. There were some interesting differences seen with the 2018-2019 flu season both in Michigan and nationally. The flu season within Michigan and nationally was record breaking in terms of length. This was reflected in the numbers of specimens submitted to the BOL for testing in March and April of 2019 with both March and April seeing almost double the number of specimens received compared to the previous flu season.

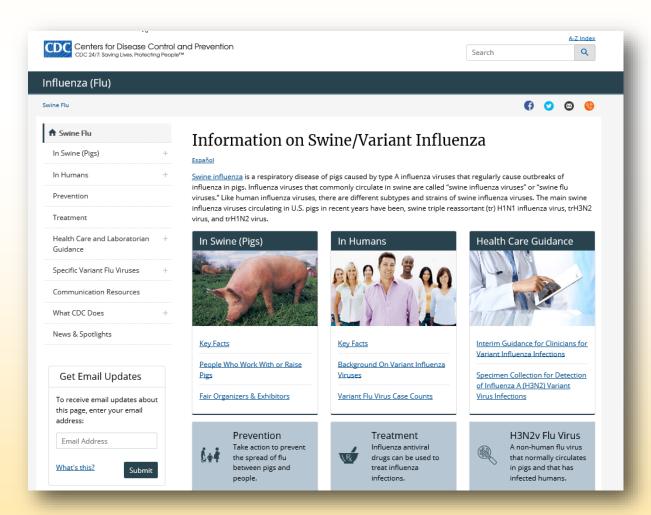


From October 2018 – May 2019, sentinel influenza laboratories across Michigan submitted 867 respiratory specimens for testing at MDHHS BOL, of which 796 (91.8%) were confirmed positive for the flu virus.

#### Figure 2

#### **Inset: Variant/Novel Influenza**

Michigan has identified one confirmed case of variant influenza A (H1N1v) infection in an adult resident with flu-like illness that occurred in May. This is the first influenza A/H1N1v virus detected in the U.S. in 2019. Influenza viruses that circulate in swine are called variant viruses when isolated from humans. Further information on influenza in swine, variant influenza infection in humans, and ways to safely interact with swine can be found at <a href="http://www.cdc.gov/flu/swineflu/index.htm">http://www.cdc.gov/flu/swineflu/index.htm</a>. Laboratories are reminded to promptly forward to MDHHS BOL all influenza positive specimens during the summer for confirmation and characterization. Persons with ILI should be asked about possible swine exposure including attendance at local fairs or swine exhibits.



# MDHHS BOL Offers Free Packing and Shipping Classes

Author: Shannon Sharp, MT(ASCP), Bioterrorism Training Coordinator

The Packaging and Shipping class provides the participant with a comprehensive overview of Federal (DOT & USPS) and International (IATA) regulations applicable to packaging and shipping of clinical laboratory specimens.

This intermediate level course offers an understanding of terminology, packaging, marking, labeling, and documentation requirements through integration of lecture, demonstrations, group exercises, and handouts. Successful completion of this course meets the requirements for employer certification.

The first two hours of class is combined training for individuals seeking their initial certification and for participants requiring recertification. Participants who have never been certified in Packaging and Shipping of Clinical Laboratory Samples, will complete an additional 2 hours of class which includes in-depth discussion, hands-on exercises, and time for questions and answers.

If you are interested in attending the sessions listed in the adjacent table, please register through the MI-TRAIN website: <a href="https://www.train.org/mi-train">https://www.train.org/mi-train</a>
The course name is <a href="Packaging and Shipping of Clinical Samples.">Packaging and Shipping of Clinical Samples.</a>
The course identification number is <a href="1062236">1062236</a>.

**Questions?** Email Shannon Sharp at <a href="mailto:sharps1@michigan.gov">sharps1@michigan.gov</a>

Facility	Address	Date	Time
Sparrow Hospital Laboratory  Room: Laboratory Conference Room	1215 East Michigan Ave- nue Lansing, MI 48912	07/08/2019	9am-11am ( <b>Recertification only)</b> & 12pm-4pm (Recertification 12pm-2pm)
Sparrow Hospital Laboratory  Room: Laboratory Conference Room	1215 East Michigan Ave- nue Lansing, MI 48912	07/22/2019	12pm-4pm (Recertification 12pm-2pm)
Mackinac Straits Health System  Room: Hospital Board Room 2nd floor	1140 North State Street Saint Ignace, MI 49781	08/06/2019	12pm-4pm (Recertification 12pm-2pm)
Helen Newberry Joy Hospital & Healthcare Center Room: Huron Conference	502 West Harrie Street Newberry, MI 49868	08/07/2019	10am-2pm (Recertification 10am-12pm)
Schoolcraft Memorial Hospital Room: Conference Room 1-2	7870 West US Highway 2 Manistique, MI 49854	08/08/2019	10am-12pm or 1pm-3pm (Recertification only)
OSF Healthcare St. Francis Hospital Room: Conference Room ABC	3401 Ludington Street Escanaba, MI 49829	08/09/2019	12:30pm-4:30pm (Recertification 12:30pm-2:30pm)
Dickinson County Healthcare System Room: Conference Room B	1721 South Stephenson Avenue Iron Mountain, MI 48901	08/12/2019	12pm-4pm <b>(Central Time)</b> (Recertification 12pm-2pm)
Upper Peninsula Health System Portage Room: Conference Center; Room 5	500 Campus Drive Hancock, MI 49930	08/13/2019	12pm-4pm (Recertification 12pm-2pm)
Upper Peninsula Health System Laboratory—Marquette Room: TBD	850 W Baraga Road Marquette, MI 49855	08/14/2019	12pm-4pm (Recertification 12pm-2pm)





Collection & Shipping Kits

Submitters will soon be able to order collection materials and shipping kits from the Bureau of Laboratories online. The online ordering system is currently being tested and is expected to be rolled out later this summer.

Placing orders via the paper-based manual system can be confusing, especially for new clients. Online ordering will include pictures of our kits and supplies, so it will be easier for clients to find the exact items they want to order. It will also provide better tracking and record-keeping. The online ordering feature will include an option that allows ordering of supplies from mobile devices as well.

Watch for the announcement in your email, and on our "What's New" webpage. If you would like to be added to our submitters' email list, please indicate your interest in receiving this announcement by sending a response to Martha Boehme at

BoehmeM@michigan.gov.

You may also monitor our webpage at <a href="https://www.michigan.gov/mdhhslab">www.michigan.gov/mdhhslab</a> for updates regarding the online ordering system.

LabLink is published quarterly by the Michigan Department of Health and Human Services, Bureau of Laboratories, to provide laboratory information to Michigan health professionals and the public health community.

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**Editor: Teresa Miller** 

